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NOTE ON THE SMERINTHINÆ.

By A. RADCLIFFE GROTE, A. M.

Having recently enjoyed the opportunity of studying the three or four common European species usually referred to *Smerinthus*, I find they belong to distinct genera. *C. ocellatus* has a blunt spine at extremity of fore tibiæ, and in cut of wing agrees well with *Copismerinthus ophthalmicus*, as pointed out by me twenty years ago. I would therefore refer *C. ocellatus*, *C. cerisii* and *C. ophthalmicus* to *Copismerinthus* Grote, 1886. I have formerly assumed that *ocellatus* was the type of Latreille's genus, but incorrectly so; since Latreille considers *populi* the type. Thus *Amorpha* Hübn. Tent., proposed for *populi* alone, is a synonym of *Smerinthus*. To *Eusmerinthus* Grt., 1886, belongs *E. geminatus* as type, which has the fore tibiæ unarmed. *Paonias* Hübn., 1818, I have restricted originally to our *P. excacatus*, and it is now generally used for this type. The genus as it stands in the Verzeichniss is a mixed genus, but it seems to have been entirely neglected by European writers until I restricted its use to *P. excacatus*. Our eyed Smerinths remaining belong to *Calasymphobus* Grote, with *astylus* as type. Butler's extension of my generic term cannot be followed.

For *tiliæ*, the term *Mimas*, Hübn. Verz. must be kept, since this is the sole species and therefore type. To this genus the European *Polyptychus quercus* is allied in the shape of the wings, There is a sulcation on primaries opposite the cell and the secondaries have a shallow excavation from vein 4 to anal angle. In *Smerinthus populi*, *Polyptychus quercus* and *Mimas tiliæ*, the fore tibiæ are unarmed. The differences in the structure of the frenulum is described by Mr. Griffiths in Entom. Record for June, 1895. In America we have no species strictly congeneric with either of these three; the nearest ally to *Smerinthus populi* is *Triptogon modesta*. Our N. Am. *Cressonia juglandis* is distinctly an American type of the group. The relationship between *Mimas* and *Polyptychus* is further evidenced by the deflexion of the antennæ at tips, more prominent in *M. tiliæ*. I would arrange these forms as follows; I have not attempted a full synonymy.

Copismerinthus Grote, 1886.Type: *C. CERISII*.

1. **ocellatus** Linn. Europe.
salicis HÜBN.
2. **cerisii** Kirby. Canada; Northern New England.
3. **ophthalmicus** Boisd. Vancouver; Northern California.

Eusmerinthus Grote, 1886.

Type: E. GEMINATUS. .

- 4.
- geminatus**
- Say.* Lower Canada to Middle States.

var. **jamaicensis** Fernald.var. **tripartitus** Grt.**Calasymbolus** Grote, 1874.

Type: C. ASTYLUS.

- 5.
- astylus**
- Drury. Southern New England; Middle States.

integerrima HARRIS.

- 6.
- myops**
- Ab. & Sm. Canada to Southern States.

Paonias Hübn., 1881.

Type: P. EXCÆCATUS A. & S. (Grote restr.).

- 7.
- excæcatus**
- Ab. & Sm. Canada to Southern States.

Mimas Hübn., 1818.

Type: M. tilia.

- 8.
- tilia**
- Linn. Europe.

Polyptychus Hübn., 1818.

Type: P. QUERCUS (Grote restr.).

- 9.
- quercus**
- Schiff. Southern Europe.

Smerinthus Latr., 1805 = AMORPHA Hübn., 1806.

Type: S. POPULI.

- 10.
- populi**
- Linn. Europe.

Triptogon Bremer.

- 11.
- modesta**
- Harris. Canada; U. S. east of Rocky Mts.

var. **occidentalis** Hy. Edw.**Cressonia** G. & R. 1865.

Type: C. JUGLANDIS.

- 12.
- juglandis**
- Ab. & Sm. Canada to Southern States; Mexico.

* If *jamaicensis* Drury is our species with a wrong locality, the name has priority, but from the uncertainty I do not propose it. I have not found any *Smerinthus* in any West Indian collection hitherto examined by me. I have not been able to examine any of the Asiatic species.